

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method of forming ferromagnetic inductive cores on ~~the~~ a surface of a dielectric material, comprising the steps of:
plasma etching the surface of the dielectric material to roughen its surface and to create peaks and valleys in the surface of that material exhibiting van der Waal forces capable of attracting catalytic particles having a slight electrostatic dipole;
dipping ~~[[a]]~~ the surface of ~~[[a]]~~ the dielectric material in a solution containing catalytic metal particles having a slight electrostatic dipole moment when in solution to help the particles attach to the surface of the dielectric material; and
placing the surface of the dielectric material in a first metal salt solution in metastable equilibrium with a reducing agent so as to cause a first layer containing metal to be plated upon the surface of the dielectric material containing the catalytic metal particles by a process of electroless plating in order to produce the ferromagnetic inductive cores.
2. (Canceled)
3. (Currently amended) The method of claim ~~2~~ 1, wherein the plasma etching is non-reactive ion etching.
4. (Currently amended) The method of claim 1, wherein said ferromagnetic ~~material is~~ cores are phosphorous doped nickel.
5. (Currently amended) The method of claim 1, wherein said ferromagnetic ~~material is~~ cores are boron doped nickel.

6. (Original) The method of claim 1, wherein the catalytic particles are particles selected from the group consisting of cobalt, palladium, ruthenium, rhodium, platinum, iridium, osmium, nickel, and iron.
7. (Original) The method of claim 1,
wherein said first layer is thin layer of relatively conductive metallic material used as a seed layer; and
further comprising the step of, after the formation of said seed layer, placing the surface of the dielectric material in a second metal salt solution in metastable equilibrium with a reducing agent which has a higher concentration of non-metal elements than said first solution so as to cause material to be plated upon the seed layer which is a ferromagnetic material having a lower conductivity than the material of said seed layer.
8. (Original) The method of claim 1,
wherein said first layer is thin layer of relatively conductive metallic material used as a seed layer; and
further comprising the step of electroplating less conductive ferromagnetic material onto said seed layer.
9. (Original) The method of claim 1, wherein said method forms an inductor core on or between one or more dielectric layers of a printed circuit board.
10. (Original, formerly withdrawn) The method of claim 1, wherein said method forms an inductor core on or between one or more dielectric layers of a multichip module.
11. (Original, formerly withdrawn) The method of claim 1, wherein said method is used to form an inductor core on or between one or more dielectric layers of an integrated circuit.

12. (Original, formerly withdrawn) The method of claim 1, wherein said method is used to form an inductor core on or between one or more dielectric layers of a micro-electromechanical device, and said inductor is used to provide electromagnetically induced movement to a mechanical element of that device.

13. (New) A method of plating metallic material on the surface of a dielectric material, said method comprising the steps of:

plasma etching the surface of the dielectric material to roughen its surface and to create peaks and valleys in the surface of that material which have van der Waal forces capable of attracting catalytic particles which have a slight electrostatic dipole;

dipping the surface of the dielectric material in a solution containing catalytic metal particles which have a slight electrostatic dipole when in solution to help those particles attach to the dielectric material's surface; and

placing the surface of the dielectric material in a metal salt solution in metastable equilibrium with a reducing agent so as to cause the metal to be plated upon the surface of the dielectric material containing the catalytic metal particles by a process of electroless plating.

14. (New) The method of claim 13, wherein the plasma etching is non-reactive ion etching.

15. (New) The method of claim 13, wherein the catalytic particles are particles selected from the group consisting of cobalt, palladium, ruthenium, rhodium, platinum, iridium, osmium, nickel, and iron.

16. (New) The method of claim 13, wherein the material deposited by the electroless plating is a conductor.